## **ABSTRACT**

This specification discloses a temperature compensation attenuator comprising a base 6, a film thermistor 1 disposed on the base 6, an input terminal 3 and an output terminal 4 which are connected to the two ends of the film thermistor 1, respectively, and a film resistor 2, wherein the top side of the film resistor 2 is electronically connected to the bottom side of the thermistor 1, and the bottom side of the film resistor 2 is electronically connected to the ground. By connecting the temperature compensation attenuator of the present invention to a high frequency or microwave active circuit, it can compensate for the variance in the gain of the high frequency or microwave active device or the drift of the frequency characteristic of the active device due to temperature variance. The temperature compensation attenuator of the present invention can be used in various circuits and systems utilizing high frequency waves or microwaves, in particular, it is suitable for mobile communication systems, satellite communication systems, and radar systems which require strict temperature characteristics.